UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
VAN DOREN, BETH

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/474,974	SAMRA ET AL.
	Examiner	Art Unit	
	Beth Van Doren	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _17 December 2004_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-4,6-11,13-16 and 18-27_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _1-4,6-11,13-16 and 18-27_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _17 December 2004_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   The following is a final office in response to communications received 12/17/04. Claims

1 and 11 have been amended. Claims 1-4, 6-11, 13-16, and 18-27 are pending in this

application.

Response to Amendments

2.   Applicant's drawing correction of 12/17/04 is sufficient to overcome the drawing

objection set forth in the previous office action.

3.   Applicant's arguments with respect to the 35 USC § 112, first paragraph, are persuasive

and there these rejections have been withdrawn. However, Examiner is interpreting the language

"using the targeting engine to determine a sequential order for combining the models to define

the target group" and "determine a sequential order for combining said models to define the

target group" to mean that the targeting engine is using a predetermined sequential order to

combine the models, as stated in the Applicant's arguments.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 1-4, 6-11, 13-16, and 18-27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Honarvar (U.S. 6,321,206) in view of Jackson et al. (*Strategic Database*

Marketing).

5.   As per claim 1, Honarvar discloses a method for increasing the efficiency of marketing

campaigns using a targeting engine for analyzing data input and generating data output, said

method including the steps of:

using historical data to determine a target group based upon a plurality of models

embedded within and executed by the targeting engine wherein each model is predicted customer

profile, the plurality of models include risk models, attrition models, and profitability models,

each model is a statistical analysis for predicting a behavior of a prospective customer, wherein a

risk model predicts a likelihood of whether the prospective customer will at least one of pay on

time, be delinquent with a payment and declare bankruptcy, an attrition model predicts a

likelihood of whether the prospective customer will remain a customer or become a customer of

a competitor, a profitability model predicts a net present value of the prospective customer (See

column 6, lines 25-30, which discusses target systems. See column 1, lines 48-67, column 2,

lines 15-35 and 50-67, column 3, lines 10-35, column 4, lines 20-40, column 8, lines 1-20 and

60-67, column 9, lines 1-15, column 10, lines 1-10 and 30-40, column 11, lines 5-15, wherein

past performance data is used to determine a grouping of customers. A plurality of models

(functions/mechanisms) can be applied independently to the data, these models including

attrition, risk, and profitability (likelihood of an accepted offer));

using the targeting engine to determine a sequential order for combining the models to

define the target group, the model combination includes a risk model, an attrition model, and a

profitability model (See column 2, lines 1-35 and 50-67, column 3, lines 10-35, column 4, lines

20-40, column 8, lines 1-20 and 60-67, column 9, lines 1-15 and 62-67, column 10, lines 1-10

and 30-40, wherein models are combined in a sequential order (function set) to define the group);

combining the models in the determined sequential order to define an initial customer

group, the initial customer group satisfying each of the combined models and rank ordered by

projected profitability wherein projected profitability is based on at least one of probable

response by a customer to a marketing campaign, attrition of the customer, and risk associated

with the customer, the list includes a high profit end, a moderate profit section, and a low profit

end, the high profit end including customers having a highest projected profitability, the low

profit end including customers having a lowest projected profitability, the moderate profit

section including a profitability baseline, wherein the determined sequential order maximizes a

number of customers included between the high profit end and the profitability baseline, the

target group includes customers included in the high profit end of the list and the profitability

baseline (See figure 4A, 5, and 9-10, column 4, lines 20-40, column 8, lines 1-20, column 9,

lines 1-15, column 10, lines 1-10 and 30-40, column 12, lines 40-60, column 14, lines 10-50,

column 15, lines 1-30, wherein the models are combined and the customers are separated into

groups based on projected profitability based on at least risk. The ordering of customers includes

a high, middle, and low end, and wherein the system tries to maximize the persons with the most

likelihood of a profitable return);

using the targeting engine to determine the profitability baseline for the marketing

campaign (See figure 4A, 5, and 9-10, column 4, lines 20-40, column 8, lines 1-20, column 9,

lines 1-15, column 10, lines 1-10 and 30-40, column 12, lines 40-60, column 14, lines 10-50,

column 15, lines 1-30, wherein the customers are separated into groups based on projected

profitability and marketing campaigns are directed to a specific group based on expected and

wanted profitability);

directing the marketing campaign towards the target group determined by the models (See at least figures 4a, 4b, and 10, column 4, lines 5-12 and 35-60, column 9, lines 1-15, column 11, lines 25-45, which discusses making offers).

However, Honarvar does not expressly disclose that the profitability baseline defines marginal returns for a customer equal to zero.

Jackson et al. discloses that the profitability baseline for the marketing campaign wherein the profitability baseline defines marginal returns for a customer equal to zero (See at least pages 175 and 176, which discuss grouping customers by profitability and drawing a line between profitable and not profitable. The boundary lies where the return on marketing investments equals zero).

Both Honarvar and Jackson et al. disclose software-based systems that evaluate data associated with clients to group the clients for marketing purposes. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the profitability baseline define marginal returns for a customer equal to zero in order to improve profitability and maximize customer value customer by only including those customers with lower chances of value loss. See column 1, lines 25-47.

6.   As per claim 2, Honarvar discloses wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine a depth of a targeted mailing that includes the target group (See at least figures 4a, 4b, 10, and 12, column 4, lines 5-12 and 35-60, column 9, lines 1-15 and 35-61, column 11, lines 25-45, which discusses sending offers based on the combined models, the models using historical performance data and evolving with time).

7.   As per claim 3, Honarvar teaches wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine the likelihood of a customer response (See at least figures 4a and 4b, column 4, lines 20-55, column 9, lines 5-25, which discusses a customer's propensity being a factor).

8.   As per claim 4, Honarvar further discloses wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to generate a potential customer list (See at least figures 4a, 4b, and 10, column 4, lines 5-12 and 35-60, column 9, lines 1-15, column 11, lines 25-45, which discusses combining the models using past performance and observation data to determine a group of potential customers to which to send the targeted offers).

9.   As per claim 6, Honarvar discloses wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine expected profitability per customer of a marketing campaign (See at least figures 4a and 4b, column 4, lines 20-55, column 9, lines 5-25, which discusses a customer's propensity and activities with the accepted offer being a factor).

10.   As per claim 7, Honarvar teaches wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine the expected profitability per product of a marketing campaign (See at least figures 4a and 4b, column 4, lines 20-55, column 9, lines 5-25, which discusses a customer's propensity to accept the offer being a factor).

11.   As per claim 8, Honarvar discloses wherein said step of directing the marketing campaign towards the target group determined by the models further comprises the step of rank ordering

accounts (See at least figures 4a, 4b, 10, and 12, column 4, lines 5-12 and 35-60, column 9, lines

1-15 and 35-61, column 11, lines 25-45, which discusses ordering the customers into ranked

order accounts, such as gold, platinum, and bronze with associated risk scores).

12.   As per claim 9, Honarvar discusses wherein said step of directing the marketing

campaign toward the target group determined by the models further comprises the step of

segmenting accounts based on customer demographics (See column 3, lines 20-32, column 7,

lines 62-67, and column 8, lines 1-30, column 9, lines 35-45, column 10, lines 25-40 and 51-67,

and column 12, liens 1-6 and 22-42, which segments based on demographics).

13.   As per claim 10, Honarvar further teaches wherein said step of directing the marketing

campaign toward the target group determined by the models further comprises the step of

identifying cross-sell targets (See at least column 1, lines 49-65, which discusses cross-selling).

14.   Honarvar discloses elements of claim 11, as set forth above in the rejection of claim 1.

Honarvar further discloses a system comprising:

        a customer database which includes customer demographics and historical data (See at

least figures 12 and 15-16, column 2, lines 30-67, column 9, lines 1-15, column 10, lines 1-10

and 30-40, column 11, lines 5-15, column 15, lines 40-67, and column 16, lines 1-15, which

discusses the database and performance and historic data of the system); and

        a graphical user interface for accessing a customer database and displaying data output

including the target group (See figure 16, column 10, lines 14-40 and 59-67, column 11, lines 45-

65, column 12, lines 30-60, and column 16, lines 1-35).

15.   As per claim 13, Honarvar discloses a system further configured to use historical data in

said customer database to direct a marketing campaign towards the target group determined by

the plurality of models (See at least figures 4a, 4b, and 10, column 4, lines 5-12 and 35-60,

column 9, lines 1-15, column 11, lines 25-45, which discusses directing the offers).

16.   Claims 14-16 and 18-21 are system claims that recite equivalent limitations to claims 2-4

and 6-9, respectively, and are therefore rejected using the same art and rationale applied above.

17.   As per claims 22 and 23, Honarvar teaches wherein the step of using historical data to

determine a target group further comprises the step of using historical data to determine a target

group based upon a plurality of models embedded within and executed by the targeting engine

wherein the targeting engine is further configured to determine a risk factor for the target group

after combining each model (See figures 10, 14D, 14C, column 1, lines 48-67, column 2, lines

15-35, column 4, lines 20-40, column 9, lines 1-15, column 10, lines 30-40, column 12, lines 40-

60, column 14, lines 10-50, column 15, lines 1-30, which discuss combining models and

determining and considering a risk score with the models).

18.   As per claim 24, Honarvar teaches wherein said step of using historical data to determine

a target group further comprises the step of:

        storing in a database historical data for a plurality of potential customers including for

each potential customer at least one of an age, a gender, a marital status, an income, a transaction

history, and a transaction measure (See at least figures 12 and 15, column 2, lines 30-67, column

9, lines 1-15, column 10, lines 1-10 and 30-40, column 11, lines 5-15, wherein at least a

transaction history and/or measure is stored);

        combining the models in the determined sequential order to define the initial customer

group by applying a first model included in the determined sequential order to each of the

plurality of potential customers included in the database to generate a first segment of only those

potential customers satisfying the first model, applying a second model included in the

determined sequential order to the first segment to generate a second segment of only those

potential customers satisfying the combination of the first and second models, and then applying

each subsequent model included in the determined sequential order to a segment generated by

the combination of each prior model (See figures 5 and 10, column 4, lines 20-40, column 8,

lines 1-20, column 9, lines 1-15, column 10, lines 1-10 and 30-40, column 15, lines 1-30, column

17, lines 40-60, wherein the models are combined in a sequential order, with a first segment

model applied then a category model, etc.).

19.   As per claim 25, Honarvar teaches wherein said step of combining the models in the

determined sequential order to define the initial customer group further comprises combining the

models in the determined sequential order to determine a risk factor for each potential customer

within the initial customer group (See figures 10, 14D, 14C, column 1, lines 48-67, column 2,

lines 15-35, column 4, lines 20-40, column 9, lines 1-15, column 10, lines 30-40, column 12,

lines 40-60, column 14, lines 10-50, column 15, lines 1-30, which discuss combining models and

determining and considering a risk score with the models).

20.   Claims 26 and 27 recite equivalent limitations to claims 24 and 25, respectively, and are

therefore rejected using the same art and rationale as applied above.

Response to Arguments

21.   Applicant's arguments with respect to claims 2-4, 6-10, 13-16, and 18-27 and Jackson et

al. (*Strategic Database Marketing*) have been considered but are moot in view of the new

grounds of rejection, as necessitated by amendment.

22.   Applicant's argument with regards to claims 1 and 11 has been considered, but is not

persuasive. Applicant argues that Jackson et al. does not teach or suggest the profitability

baseline defines marginal returns for a customer equal to zero.

In response to this argument, Examiner respectfully disagrees and points out that the

system of Jackson et al. identifies customers for marketing investment of resources based on the

customers projected profitability. When a customer is grouped with customers that have a

predicted positive profit flow (i.e. profit greater than zero), the customer is grouped into the

target group. If a customer is grouped in with customers that have a negative profit flow (i.e.

profit less than zero), the customer is not grouped in the target group. The profitability baseline

(or boundary) is set based on zero returns. See at least pages 175 and 176, which discuss

grouping customers by profitability and drawing a line between profitable and not profitable. The

boundary lies where the return on marketing investments equals zero.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Philips (U.S. 6,792,399) discloses combinations forecasting using a group of performed forecasters.

Honarvar et al. (U.S. 6,405,173) discloses account and customer decision analysis using simulation and a management system.

Blume et al. (U.S. 6,839,682) discloses predictive modeling of financial behavior of customers using segmentation and other techniques.

Lee et al. (U.S. 2002/007951) discloses a marketing support database used for analysis.

Lazarus et al. (U.S. 6,430,539) discloses predictive modeling of financial behavior of customers using consumer profiles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (703) 305-3882. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bvd
February 7, 2005

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